

What is claimed is:

1. A hydrogel adhesive comprising from 10 weight percent to 60 weight percent of a cross-linked hydrophilic polymer, from 5 weight percent to 80 weight percent of a water-soluble non-ionic humectant, and from 10 weight percent to 85 weight percent water, wherein said hydrophilic polymer comprises at least 50 mole percent of at least one weak-acid monomer unit having a pKa above 3, said weak-acid monomer unit being at least 50 mole percent in their acidic form, said hydrophilic polymer further comprising less than 30 mole percent of all monomer units in salt form; and, wherein said hydrogel adhesive has an elastic modulus at a temperature of 25°C, G'_{25} (1rad/sec), ranging from 2000 Pa to 6000 Pa.
2. The hydrogel adhesive of Claim 1, wherein said weak acid monomer units are present at levels of at least 80 mole percent.
3. The hydrogel adhesive of Claim 1, wherein said weak-acid monomer unit is selected from the group consisting of acrylic acid, methacrylic acid, maleic acid, itaconic acid, crotonic acid, ethacrylic acid, citroconic acid, fumaric acid, β -sterylacrylic acid and combinations thereof.
4. The hydrogel adhesive of Claim 1, wherein said weak acid monomer unit is present in an acidic form of at least 70 mole percent.
5. The hydrogel adhesive of Claim 1, wherein said water-soluble nonionic humectant comprises a polyhydric alcohol.
6. The hydrogel adhesive of Claim 5, wherein said water-soluble nonionic humectant further comprises glycerol.
7. The hydrogel adhesive of Claim 1 wherein said hydrogel has a Saline Absorption Rate of less than $2.5 \times 10^{-3} \text{ g/cm}^2/\text{sec}^{0.5}$.

8. The hydrogel adhesive of Claim 1, wherein said hydrogel adhesive has a peel strength on dry skin ranging from 0.3 N/cm to 3.0 N/cm and a viscous modulus at a temperature of 25°C, G''_{25} , wherein the ratio of G''_{25} (1rad/sec)/ G'_{25} (1rad/sec) ranges from 0.15 to 0.65.
9. The hydrogel adhesive of Claim 1, wherein said hydrophilic polymer comprises at least 90 mole percent of a weak acid monomer unit, said weak acid monomer unit being at least 85 mole percent in an acidic form.
10. The hydrogel adhesive of Claim 1, wherein said hydrogel adhesive is capable of attachment to mammalian skin.
11. The hydrogel adhesive of Claim 1, wherein said adhesive is disposed on a wearer facing surface of a disposable human waste management device, said device comprising a bag, said bag further comprising an aperture and a flange disposed about said aperture, said flange further comprising said wearer facing surface and a garment facing surface.
12. The hydrogel adhesive of Claim 1, wherein said adhesive is disposed on a wearer facing surface of an absorbent article, said article comprising said wearer facing surface and a garment facing surface.
13. The hydrogel adhesive of Claim 1, wherein said adhesive is disposed on a functional article, said functional article being selected from the group consisting of cosmetic delivery articles, pharmaceutical delivery articles, decorative cosmetic articles, cleaning articles, protective articles, clothing, prosthesis, cold wraps, thermal wraps, hearing aids, ornamental articles, goggles, eye wear, for attachment to the skin, and combinations thereof.
14. A hydrogel adhesive suitable for attachment to mammalian skin, said hydrogel adhesive comprising from 10 weight percent to 60 weight percent of a cross-linked hydrophilic polymer, from 5 weight percent to 80 weight percent of a water-soluble non-ionic humectant, and from 10 weight percent to 85 weight percent water, wherein said hydrophilic polymer comprises at least 90 mole percent of weak acid monomer units, said weak acid monomer units being from 75 mole percent to 95 mole percent in an acidic

form; and wherein said hydrogel adhesive has an elastic modulus at a temperature of 25°C, $G'_{25}(1\text{rad/sec})$, ranging from 1,000 Pa to 10,000 Pa.

15. The hydrogel adhesive of Claim 14, wherein said hydrophilic polymer comprises at least 95 mole percent weak acid monomer units, said weak acid monomer units being from 85 mole percent to 95 mole percent in an acidic form, and wherein said $G'_{25}(1\text{rad/sec})$ ranges from 4000 Pa to 5500 Pa.
16. The hydrogel adhesive of Claim 14 wherein said water-soluble non-ionic humectant comprises glycerol and said weak acid monomer units comprises acrylic acid.
17. The hydrogel adhesive of Claim 16 wherein said acrylic acid comprises salt form monomer units, said acrylic acid monomer units further comprising a counter ion selected from the group consisting of monovalent metal ions, divalent metal ions, trivalent metal ions, and combinations thereof.
18. The hydrogel adhesive of Claim 14, wherein said hydrogel adhesive has a peel strength on dry skin ranging from 0.3 N/cm to 3.0 N/cm, and a viscous modulus at a temperature of 25°C, $G''_{25}(1\text{rad/sec})$, wherein the ratio $G''_{25}(1\text{rad/sec})/G'_{25}(1\text{rad/sec})$ ranges from 0.15 to 0.65.